

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1.     **(Previously Presented)**     An electroplating solution for copper comprising  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ,  $\text{H}_2\text{SO}_4$ , HCl, polyethylene glycol with a molecular weight greater than 200, hydroxyl amine sulfate, and hydroxyl amine chloride.
  
2.     **(Currently Amended)**     A An electroplating solution according to claim 1 further comprising  $\text{Cl}^-$  ions in a range of 50 – 150 ppm and wherein the hydroxyl amine sulfate is in a range of 0.01 – 5 g/l.
  
3.     **(Currently Amended)**     A An electroplating solution according to claim 1 further comprising  $\text{Cl}^-$  ions derived at least from the HCl in a range of 55 – 125 ppm.
  
4.     **(Previously Presented)**     An electroplating solution according to claim 1, further comprising an additive.
  
5.     **(Currently Amended)**     A solution according to claim 4, wherein the additive is thiourea, molasses, glucose, tribenzylamine, benzotriazole, or naphthalene sulfonic acid, ~~or~~  $(\text{NH}_2\text{OH})_2 \cdot \text{H}_2\text{SO}_4$ .

6. (Currently Amended) An electroplating solution ~~made by comprising~~ adding together:

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ;

$\text{H}_2\text{SO}_4$ ;

$\text{HCl}$ , ~~and~~;

optionally an additive; and

polyethylene glycol with a molecular weight greater than 200, and either hydroxyl amine sulfate or hydroxyl amine chloride.

7. (Currently Amended) An electroplating solution comprising:

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ;

$\text{H}_2\text{SO}_4$ ;

$\text{Cl}^-$  ions, ~~and~~;

polyethylene glycol with a molecular weight greater than 200; and

hydroxyl amine sulfate or hydroxyl amine chloride.

8. (Currently Amended) An electroplating solution according to claim 7, wherein the concentration of  ~~$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$~~   $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  is 60 – 150 g/l,  $\text{H}_2\text{SO}_4$  is 80 – 150 g/l,  $\text{Cl}^-$  ions are 50 – 150 ppm, and polyethylene glycol is less than 100 ppm, ~~and optionally an additive.~~

9. (Canceled)